

Work Order ID 98736

March-21-13 2:19:42 PM

98736

Page 1

Item ID: D3907-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Stop

NS2

Start Date: 3/21/13

Start Qty: 40.00

40

Cust Item ID:

Required Date: 3/28/13

Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan: MUS

Date: 13-03-21

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|-------|---|
| D3907 | A |
|-------|---|

100

0.00

100

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

Machine as per Folio FA823
& Dwg D3907

P0

13/03/23

40 Ø

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

P0 13/03/23

40 Ø

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

| Work Order: _____ | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | |
|-------------------------------------|------------------------------|--------------------------|---|--|--|--|---------------------------------|--------------|--------------|--|--|
| | | | Rework Scrap Use-as-is Work Order Update | Skid-tube Machining Thermoforming Large Fab | Crosstube Small Fab Finishing Composite | Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier | Engineering Quality Other | | | | |
| Part No. _____ NCR No. _____ | | | | | | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear | General | | | | | | | | | | |
| | Bending | <input type="checkbox"/> | Grain | <input type="checkbox"/> | Ovalized | <input type="checkbox"/> | Pressure/Forced | | | | |
| | Centre Not Concentric to O/S | <input type="checkbox"/> | Hardware | <input type="checkbox"/> | Over/Under tolerance | <input type="checkbox"/> | Temperature/Cure | | | | |
| | Cracks | <input type="checkbox"/> | Inspection Incomplete | <input type="checkbox"/> | Part Incorrect | <input type="checkbox"/> | Weld | | | | |
| | Crushed/Crimped | <input type="checkbox"/> | Instructions Incomplete/Unclear | <input type="checkbox"/> | Part Lost/Missing | <input type="checkbox"/> | Wrong Stock Pulled | | | | |
| | Cuffs | <input type="checkbox"/> | Maintenance | <input type="checkbox"/> | Part Moved | <input type="checkbox"/> | | | | | |
| | Heat Treat | <input type="checkbox"/> | Mislabeled | <input type="checkbox"/> | Positioned Wrong | <input type="checkbox"/> | | | | | |
| | Inspection Strip in Tube | <input type="checkbox"/> | Misread | <input type="checkbox"/> | Power Loss/Surge | <input type="checkbox"/> | Other | | | | |
| | Ripples in Bend | <input type="checkbox"/> | Offset | <input type="checkbox"/> | | <input type="checkbox"/> | | | | | |
| | Torque Waves in Extrusion | <input type="checkbox"/> | Out of Calibration | <input type="checkbox"/> | | <input type="checkbox"/> | | | | | |
| | Turning Sequence | <input type="checkbox"/> | Out of Sequence | <input type="checkbox"/> | | <input type="checkbox"/> | | | | | |
| | Wave/Twist in Tube | <input type="checkbox"/> | Outside Dimensions | <input type="checkbox"/> | | <input type="checkbox"/> | | | | | |

Work Order ID 98736

March-21-13 2:19:42 PM

98736

Page 2

Item ID: D3907-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Start Date: 3/21/13 Start Qty: 40.00

40

Cust Item ID:

Required Date: 3/28/13 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

3-3-24

40

1

DAS
04
9-89

120

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: WA004

0.00

130

Packaging

Memo

0.00

Packaging

*****STOCK IN BASKET CELL*****

40 13-03-26 MAL

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

13/3/27 A

UMF
13-3-26

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

| Work Order: _____ | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
|---|------|------|---|--|--|--|---------------------------------|--------------|--------------|---|--|---|--|
| | | | Rework Scrap Use-as-is Work Order Update | Skid-tube Machining Thermoforming Large Fab | Crosstube Small Fab Finishing Composite | Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier | Engineering Quality Other | | | | | | |
| Part No. _____ NCR No. _____ | | | | | | | | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/> | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <hr/> <hr/> | |

Picklist Print

March-21-13 2:19:46 PM

Page 1

Work Order ID: 98736

98736
D3907-1

Parent Item: D3907-1

Parent Item Name: Bushing

Start Date: 3/21/13

Start Qty: 40.00

Required Date: 3/28/13

Required Qty: 40.00

Comments:

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304R0.375 | | Purchased | No | | | 100 | f | 77.6160 | 0.03 | 1.2 | | | |

M304R0 375

304 ROUND BAR 0.375

**

PO 13/03/23

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT029 | 77.616 | |
| 119346 | 2.328 | |
| 120204 | 5.442 | |
| 121380 | 3.846 | |
| → 123294 | 66 | 1.2 |

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

| Work Order: _____ | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | | | |
|---|--------------------------|------|---|---|---|---|---|---|--------------|--------------|--|--|---|--|
| | | | Rework <input type="checkbox"/> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | |
| | | | Scrap <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | |
| | | | Use-as-is <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | |
| | | | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | |
| Root Cause | | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | <input type="checkbox"/> | | | | | | | | | | | | | |
| Equip/Tooling | <input type="checkbox"/> | | | | | | | | | | | | | |
| Operator | <input type="checkbox"/> | | | | | | | | | | | | | |
| Material | <input type="checkbox"/> | | | | | | | | | | | | | |
| Setup | <input type="checkbox"/> | | | | | | | | | | | | | |
| Other | <input type="checkbox"/> | | | | | | | | | | | | | |
| Process | <input type="checkbox"/> | | | | | | | | | | | | | |
| Supplier | <input type="checkbox"/> | | | | | | | | | | | | | |
| Training | <input type="checkbox"/> | | | | | | | | | | | | | |
| Unapproved | <input type="checkbox"/> | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | |

| | | |
|-----------------------|--------------|-------------|
| DART AEROSPACE LTD | Work Order: | 98736 |
| Description: Bushing | Part Number: | D3907-1 |
| Inspection Dwg: D3907 | Rev: A | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

SAS

| | | | | | |
|--------------|----------|-------------|------------|-----------------------|--|
| Measured by: | 19 | Audited by: | 04 9-89 | Preliminary Approval: | |
| Date: | 13/03/23 | Date: | 3.3.24 | Date: | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|--|------------|---|
| A | 09.05.20 | New Issue | KJ | |
| B | 10.06.07 | Tolerance for dimension Ø0.375 revised | KJ |   |

NCR: Yes / No

WORK ORDER NON-COMPLIANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ **Date:** _____

| Work Order: _____ | | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
|------------------------------|----------------|------|---------------------------------|---|--|--|--|---------------------------------|--------------|--|--|--|--|
| | | | | Rework Scrap Use-as-is Work Order Update | Skid-tube Machining Thermoforming Large Fab | Crosstube Small Fab Finishing Composite | Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier | Engineering Quality Other | | | | | |
| Part No. _____ | | | | | | | | | | | | | |
| NCR No. _____ | | | | | | | | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | |
| Landing Gear | | | | General | | | | | | | | | |
| Bending | Bend | | Grain | | Ovalized | Pressure/Forced | | | | | | | |
| Centre Not Concentric to O/S | BOM/Route | | Hardware | | Over/Under tolerance | Temperature/Cure | | | | | | | |
| Cracks | Broken/Damaged | | Inspection Incomplete | | Part Incorrect | Weld | | | | | | | |
| Crushed/Crimped | Burr | | Instructions Incomplete/Unclear | | Part Lost/Missing | Wrong Stock Pulled | | | | | | | |
| Cuffs | Contamination | | Maintenance | | Part Moved | | | | | | | | |
| Heat Treat | Countersink | | Mislabeled | | Positioned Wrong | | | | | | | | |
| Inspection Strip in Tube | Cut Too Short | | Misread | | Power Loss/Surge | | | | | | | | |
| Ripples in Bend | Drill Holes | | Offset | | | | | | | | | | |
| Torque Waves in Extrusion | Drawing | | Out of Calibration | | | | | | | | | | |
| Turning Sequence | Finish | | Out of Sequence | | | | | | | | | | |
| Wave/Twist in Tube | Folio | | Outside Dimensions | | | | | | | | | | |

8 7 6 5 4 3 2 1

D

D

C

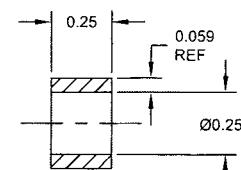
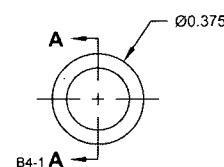
C

B

B

A

A



D3907-1 BUSHING

SECTION A-A_{C5-1}

STL 03-07-07
REF ID: D3907-1
ENGINEER: R. COOK
UNCONTROLLED DOCUMENT
SUBJECT TO CHANGE
WIRELESS COMM
WORK CENTER

98726 MWJ
13-03-21

RELEASED
01016740

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROD
REF DART SPEC M304R
- OR: AISI 304/316 STAINLESS STEEL BAR
REF DART SPEC M304B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A

| A | NEW ISSUE | AJS | 09.03.11 |
|------------|-------------|--|------------------------|
| REV. | DESCRIPTION | | BY DATE |
| DESIGN | AJS | DART AEROSPACE LTD | REV. A |
| DRAWN | AJS | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | |
| MFG. APPR. | | D3907 | REV. A SHEET 1 OF 1 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | BUSHING (BASKET REPAIR) | NTS |
| DATE | 09.03.11 | COPYRIGHT © 2009 BY DART AEROSPACE LTD | |

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

| Work Order: _____ Part No. _____ NCR No. _____ | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | | AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> | | | | | | | | |
|--|------|------|---|---|--|---|---|-------------|--------------|--------------|--|--|---|--|
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | |